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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,266	08/21/2003	Patrick E. Godici	37,335	7346

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EXAMINER

POULOS, SANDRA K

ART UNIT PAPER NUMBER

1714

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/645,266

Applicant(s)

GODICI ET AL.

Examiner

Sandra K. Poulos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-11 and 13-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/17/06 has been entered.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 3-6, 8-11, 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 5,856,280) in view of WO 02/053687 and the evidence disclosed in Meskers (US 6,348,440).

Kim discloses a turbine lubricating oil composition containing a major portion of synthetic ester base stock and a minor proportion of other additives (col 2, lines 27-37). The synthetic polyol ester base oil is formed by the esterification of an aliphatic polyol with carboxylic acid, wherein the aliphatic polyol contains from 4 to 15 carbon atoms and has from 2 to 8 esterifiable hydroxyl groups; examples of the polyol are trimethylolpropane, pentaerythritol, etc (col 2, lines 55-60). The preferred polyol ester base oil is prepared from technical pentaerythritol and a mixture of C<sub>4</sub>-C<sub>12</sub> carboxylic

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acids (col 3, lines 1-3). The examples include alkylated benzotriazole and triaryl phosphates (col 5, lines 18-19). Corrosion inhibitors can be used in the range of 0.02 to 0.5 wt%, preferably 0.05 to 0.25 wt% and include triazoles, tolyl triazole and alkylated benzotriazole (col 47-52). Meskers discloses that tolyltriazole is a synonym for tolutriazole (col 7, lines 16-20).

Kim does not disclose the use of DITMPA.

WO '687 discloses a lubricating oil composition, which exhibits excellent lubricating performance under severe high pressure/high load working conditions, and is used in machines, compressors, and turbines under severe conditions (page 1, lines 1-9; page 5, lines 5-6). WO '687 discloses a lubricating oil with little ash, has excellent anti-wear properties, has good thermal stability, water resistance, and improved odor and environmental safety (page 2, lines 13-21). The oil contains  $\beta$ -dithiophosphorylated propionic acid with the formula  $S=P(-OR^1)_2SCH_2CH(R^2)COOH$ , wherein  $R^1$  is preferably branched and from 3 to 4 carbon atoms, and  $R^2$  represents a hydrogen atom or an alkyl group from 1 to 4 carbon atom, preferably methyl (page 2, line 22 to page 3, line 8). WO '687 discloses 3-(O,O-diisobutyldithiophosphoryl)-2-methyl-propionic acid, which is when  $R^1$  is isobutyl and  $R^2$  is methyl, resulting in DITMPA, which is also used in the examples (page 3, line 13; page 17, lines 3-6). The amount of the  $\beta$ -dithiophosphorylated propionic acid is most preferably from 0.005 to 0.05 wt% (page 3, lines 15-21). Preferably the base oil is petroleum base, synthetic hydrocarbon based and/or ester based (page 5, lines 8-12). Metal deactivators such as alkyl benzotriazoles including 5-methyl benzotriazole (tolutriazole) are disclosed (page 10, line 8).

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It would have been obvious to one of ordinary skill in the art that the  $\beta$ -dithiophosphorylated propionic acid additive of WO '687, which concerns lubricating oils for use under extreme conditions, such as turbines, should be incorporated into the Kim composition to obtain a turbine oil that has excellent anti-wear properties, thermal oxidation stability, even under high speed and high load conditions.

### ***Response to Arguments***

3. Applicant's arguments, filed 10/17/06, with respect to Camenzind (US 5,922,657) have been fully considered and are persuasive. In particular, it would not have been obvious to choose from the three separate lists within Camenzind to arrive at the claimed invention. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made above.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 3931022 discloses a turbine lubricant with tolutriazole.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra K. Poulos whose telephone number is (571) 272-6428. The examiner can normally be reached on M-F 8:00-4:30 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*SKP*

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